

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 23, line 22, with the following rewritten paragraph.

--In addition, it is possible to control the temperature coefficients and the values of the DC resistance **Z_{dc}** and the AC impedance **Z_{ac}** in addition to the constant-current circuit **3**. In place of the coil portion **A** explained in FIG. 14, a coil portion **A** is used, which comprises a circuit element **5** composed of a DC resistance **Z_{dc}'** and an AC impedance **Z_{ac}'** and connected in series to the coil **2**. At this time, the DC resistance **Z_{dc}'** and the AC impedance **Z_{ac}'** of the circuit element **5** have no relation with the rotation angle Θ of the core **1**. Therefore, by appropriately selecting the temperature coefficients and the values of the DC resistance **Z_{dc}'** and the AC impedance **Z_{ac}'**, it is possible to control the temperature coefficient and the peak value of the voltage detected at both ends of the coil portion **A**.--

Please replace the paragraph beginning at page 33, line 1, with the following rewritten paragraph.

--On the other hand, FIG. 24 shows a temperature coefficient of the signal **V₂** under the condition of changing the level shift value **V_{sh}** from 0 mV to 200 mV by use of the device configuration of FIG. 20. The direct current **I_{dc}** is zero, and the temperature coefficient **h** of the level shift value **V_{sh}** is 3000 ppm/°C. In this case, it is possible to control the displacement dependency of the temperature coefficient of the signal **V₂** by changing the level-shift value **V_{sh}**. When the value **V_{sh}** is in the vicinity of 100 mV, the displacement dependency of the temperature coefficient of the signal **V₂** can be minimized. As a result, the same effects as the case of FIG. 19 can be obtained.--